

REMARKS/ARGUMENTS

Claim Status

Claims 21-26 and 28-42 are pending. Claim 27 is canceled without prejudice. Claims 31-42 are withdrawn pursuant to a previous Restriction Requirement. Claim 21 is currently amended to incorporate the subject matter of claim 27 and finds further support in the specification: page 19, lines 1-16. No new matter has been entered.

Abstract Objection

The Abstract has been objected to for improper language and format. A replacement Abstract has been provided in accordance with 37 C.F.R. 1.72. Accordingly, Applicants request the withdrawal of this objection.

Claim Rejections

Claims 21-30 are rejected under 35 U.S.C. §103(a) as obvious in view of *Kataoka* (JP 09-036405) and *Fujisaki* (JP 61-166182). Applicants respectfully traverse this rejection.

Kataoka discloses a process for producing a solar cell module wherein a photovoltaic power element is sandwiched between a surface member and a rear surface member through the use of a sealing resin to produce a laminate (Abstract). However, as the Office itself has recognized (page 5, first full paragraph), “*Kataoka* is silent as to arranging sealing resin sheet pieces ... between the solar cells so as to be sandwiched by the first sealing resin sheet and the second sealing resin sheet” as required by Applicants’ claim 21. To fulfill this identified deficiency of *Kataoka*, the Office asserts that *Fujisaki* discloses solar battery modules that utilize silicone rubber spacers that read on Applicants’ claimed resin (page 5, second and third full paragraphs).

In contrast, Applicants’ process utilizes resins selected from the group consisting of ethylene-vinyl acetate copolymer, polyvinyl butyral, and polyurethane (see claim 21). More specifically and in comparison to *Fujisaki*’s silicon rubber spacers, Applicants’ process

requires the arranging of sealing resin sheet pieces, comprising at least one resin selected from the group consisting of ethylene-vinyl acetate copolymer, polyvinyl butyral, and polyurethane, having a thickness thicker than that of the solar battery cells at a space between the solar battery cells so as to be sandwiched by the first sealing resin sheet and the second sealing resin sheet (see claim 21). Thus, the silicone rubber spacers of *Fujisaki* do not correspond to the sealing resin sheet pieces of claim 21 as alleged by the Office because Applicants' resin is limited to the three resins of the Markush group, none of which are a silicone rubber. Accordingly, since *Fujisaki* does not disclose or suggest the use of Applicants' resin, *Fujisaki* cannot fulfill the identified deficiency of *Kataoka*. Therefore, neither *Kataoka* nor *Fujisaki* alone, or in combination, disclose or suggest Applicants' process which utilizes such a resin.

Furthermore, the sealing resin sheet pieces as well as the first and second sealing resin sheets of the claimed invention are heat melted during the sealing process which unites them homogeneously and prevents cell cracks, resulting in a solar battery module having a good appearance. This is more precisely described in the specification as follows:

By arranging the sealing resin sheet piece thicker than the thickness of the solar battery cells in the space between the solar battery cells, when the internal pressure is reduced, a load by the atmospheric pressure from the front and back surfaces is not applied directly to the solar battery cells, and the sealing sheet piece receives that load. And, when the temperature rises, the resin is softened, the thickness of the sealing resin sheet piece to which a load has been applied is reduced, and the cells or the portion of the conductor connected to the cells is brought into contact with the upper and lower sealing resin sheets. At that time, since the resin sheets are entirely softened, the load is not locally applied, and it is possible to bring the cells or the conductor connected to the cells into intimate contact with the softened sealing resin sheets such that the former is embedded in the latter. In this way, it is possible to prevent cell cracks in the pressure reduction step. (page 22, line 24, to page 23, line 16)

However, silicone rubber as disclosed by *Fujisaki* does not melt during the sealing process, therefore silicone rubber can prevent the superposition or contact of solar cells in the molten sealing resin stage. On the other hand, as described above, the

sealing resin sheet pieces of the claimed invention are heat melted during the sealing process and can not act to prevent the superposition or contact of solar cells.

Accordingly, not only does *Fujisaki* not disclose or suggest Applicants' resin type, *Fujisaki* discloses a spacer with an opposite function and purpose. Therefore, one skilled in the art would not combine *Fujisaki* with *Kataoka* to attempt to obtain Applicants' process which utilizes a specific heat-meltable resin; and even if one were to combine these references, Applicants' process would not be obtained.

Accordingly, Applicants request the withdrawal of this rejection.

Conclusion

For the reasons discussed above, Applicants submit that all now-pending claims are in condition for allowance. Applicants respectfully request the withdrawal of the objection and rejections, withdrawal of the restriction requirement, and passage of this case to issue.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon



Justine M. Wilbur
Attorney of Record
Registration No. 59,678

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)